Memorandum

Date: October 8, 2003
Telephone: (916) 654-4178

To: Walnut Energy Center AFC Committee File: Walnut Energy Center (02-AFC-4)

From: California Energy Commission - Caryn Holmes, Senior Staff Counsel

1516 Ninth Street Bob Eller, Siting Project Manager

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Subject: Supplemental Testimony - SOILS&WATER-5 and SOILS&WATER-6

Attached please find the modifications to **SOILS&WATER-5** and **SOILS&WATER-6** that have been agreed to by the staff and applicant, Turlock Irrigation District (TID). The modifications to **SOILS&WATER-5** are shown in <u>underline</u>/strikeout format, based on the language found in the FSA Addendum, filed September 22, 2003. The modifications to **SOILS&WATER-6** are a complete replacement of the language of **SOILS&WATER-6** found in the Addendum.

SOILS & WATER RESOURCES

SOILS&WATER-5: The project's water use shall be limited as described below. For purposes of this condition, the bridge period is defined as that period of time between the commencement of commercial operation of the WEC and the earlier of December 31, 2006 or when recycled water from the City of Turlock's wastewater treatment plant (WWTP) is available to the WEC. Water for construction purposes shall consist of groundwater provided from the existing TID well at the Walnut substation. Water for all purposes used during the bridge period shall consist of potable water provided by the City of Turlock, and shall not exceed 2 million gallons per day or 1,803 afy.

Water for operational and landscaping purposes used after the bridge period shall consist of recycled water from the City of Turlock WWTP and shall not exceed 1,800 afy. Water for domestic needs after the bridge period shall consist of potable water provided by the City of Turlock and shall not exceed 3 afy. Potable water may also be used for back-up to the recycled water supply in the event of a short-term disruption in service and shall not to exceed 51 afy. Should the recycled water supply be extensively disrupted by a natural disaster or similar unforeseen emergency, the CPM may allow additional pumping following consultation with the City of Turlock. Potable water may also be used in the event that recycled water is not available to the project subject to the provisions of SOILS&WATER-6. Potable Alternative water use shall be calculated using a five year rolling average.

Verification: The project owner shall notify the Commission no later than May 31, 2006 and in monthly compliance reports thereafter, as to the status of recycled water production by the City of Turlock's WWTP, until the WEC is using tertiary treated, recycled water for its non-potable operational and landscaping requirements. This notice shall include information on the issues related to recycled water production, DHS approval for recycled water service and the expected availability of recycled water supplies to WEC. Should the supply of recycled water be disrupted due to a natural disaster or other unforeseen emergency, the applicant shall contact the CPM to discuss continued use of potable water by WEC. After consulting with the City of Turlock, the CPM may allow use of potable water exceeding 51 afy during the duration of the emergency, subject to any conditions necessary to protect the underground aguifer. After recycled water service is provide to WEC, the project owner shall report water use to the commission as required by SOILS&WATER-7. Annual average water use shall be calculated using a five years rolling average of actual water use starting with the first year of operation. In the event of an interruption or reduction in recycled water service that requires the use of back-up potable water, the project owner shall notify the CPM, in writing, within 24 hours.

SOILS&WATER 6 (replaces SOILS&WATER 6 that was presented in Staff's Final Staff Assessment Addendum, filed September 22, 2003):

SOILS&WATER-6: The project owner shall prepare an alternative water supply plan to address either (1) Title 22 compliant recycled water not being available from the City of Turlock's WWTP by December 31, 2006 or (2) a force majeure event occurring after initiation of recycled water service. The Plan shall be submitted no later than June 30, 2006. The Alternative Water Supply Plan shall demonstrate that high quality water use by WEC shall not exceed the historical average of 54 afy required to irrigate the 18-acre site. The project developer shall obtain approval for the alternate water supply plan prior to its implementation.

In the event that the City of Turlock's WWTP is not able to produce recycled water in accordance with Title 22 requirements by December 31, 2006 for use by WEC, the project owner shall inform the CPM no later than November 30, 2006. If the CPM determines that the WWTP is not able to produce the recycled water for delivery by December 31, 2006, the CPM shall allow implementation of the Alternative Water Supply Plan until such time as the recycled water is available.

If, after the initiation of recycled water service, a force majeure event results in the recycled water supply being temporarily interrupted, the project owner shall notify the CPM within 24 hours. As soon as reasonably possible, the project owner shall meet with the CPM and City of Turlock and confer to determine the estimated duration of the outage and how to restore the recycled water supply as soon as practicable. If the CPM determines that the force majeure event may result in recycled water being unavailable for more than 30 days, then the CPM shall allow the project owner's implementation of the Alternative Water Supply Plan for the duration of the force majeure event.

Verification: The project owner shall prepare the "Alternative Water Supply Plan" to address either (1) recycled water not available by December 31, 2006 or (2) a force majeure event. The Plan shall be submitted no later than June 30, 2006.

This plan shall demonstrate no net increase in high quality water use above the historical average of 54 afy. This plan may achieve no net increase in high quality water use by methods including, but not limited to:

- 1. Use of shallow, degraded groundwater from the unconfined aquifer in the vicinity of the project site.
- 2. Use of irrigation tailwater or return flows.

3. Continued use of potable water supplied by the City of Turlock in conjunction with conservation measures that achieve an offset of water use in excess of 54 afy on an average annual basis.

This plan shall specifically address how the project owner will demonstrate no net increase in water use, and any assumptions, calculations, needed agreements and infrastructure to implement identified measures.

In the event that recycled water is not expected by the City of Turlock to be available until after December 31, 2006, the project owner shall notify the CPM in writing no later than November 30, 2006. The notification shall include the revised schedule for recycled water availability, an explanation of the causes for the delay in recycled water service, and any relevant correspondence between the project developer and the City of Turlock regarding recycled water service.

If after the initiation of recycled water service a force majeure event results in the recycled water supply being temporarily interrupted, the project owner shall notify the CPM within 24 hours by telephone or e-mail. This notification shall describe the event that has resulted in the interruption of recycled water supply, expected duration and actions required to restore recycled water service.